

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



# PONTICS



Presented by

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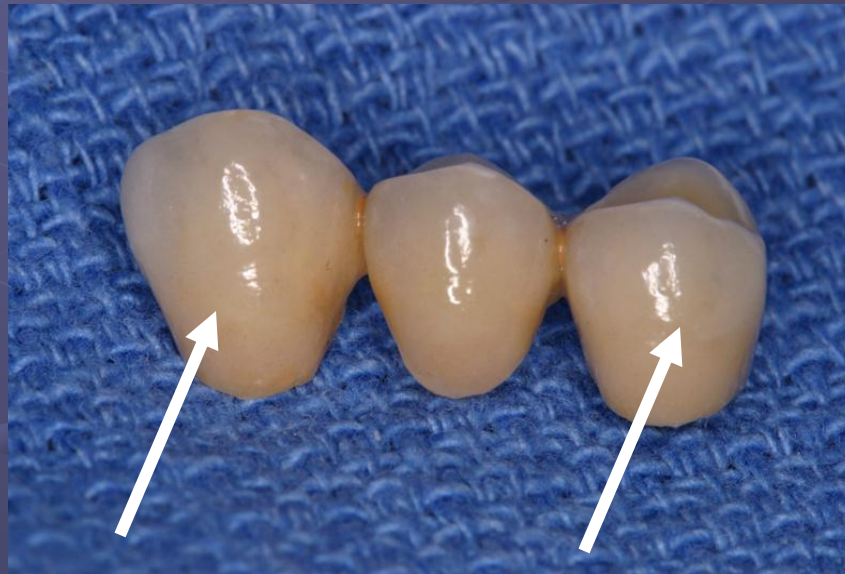
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# Fixed Partial Denture

## ● *Component Parts*

### *1- Retainers*





## ● 2- Pontic



### ● 3- Connectors



# Definition

**The pontic** is the suspended member of a fixed bridge which replaces the coronal portion of the missing natural tooth restoring its function and esthetics and is attached to the retainer either by a rigid or a non-rigid connector.





# Requirements

- 1- Restores function efficiently.
- 2- Meet the esthetic demands.
- 3- Biologically accepted.
- 4- Hygienic design.
- 5- Easily constructed.

# Function

- 1- Restores mastication and speech.
- 2- Stabilizes occlusion and maintains adjacent teeth relationship.
- 3- Improves esthetics.

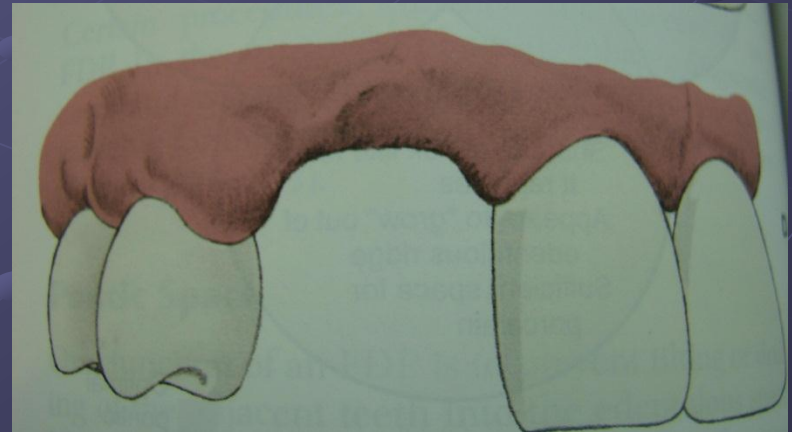
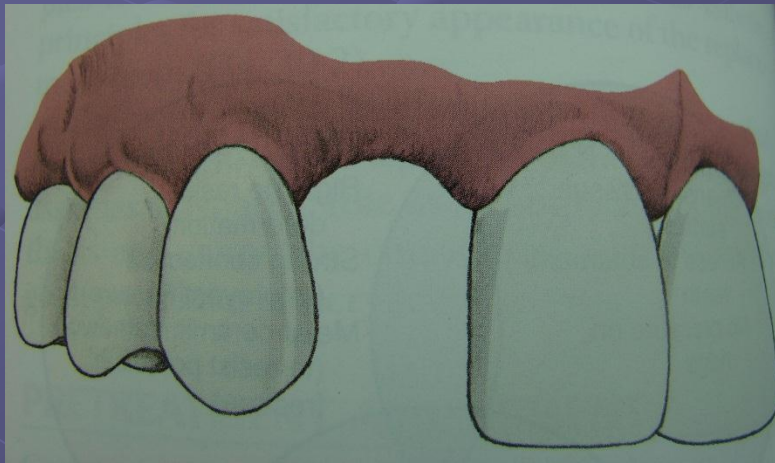
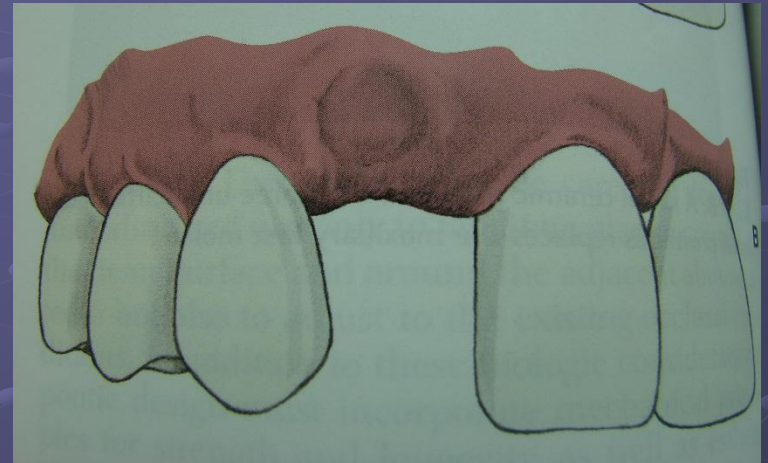
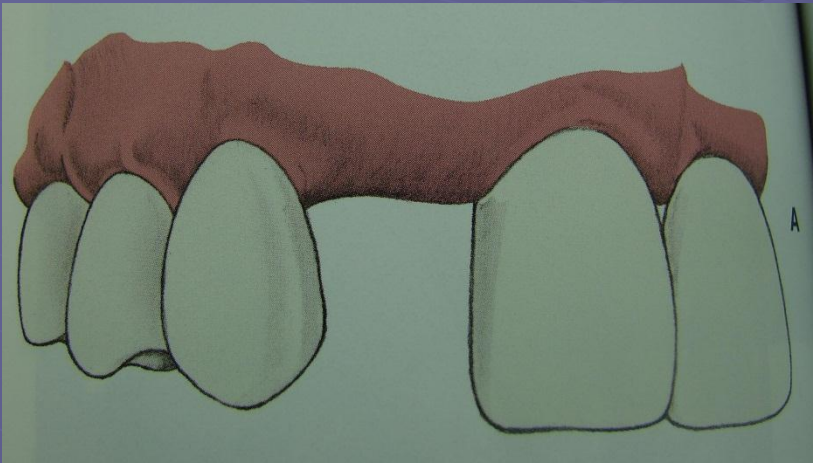
# Pretreatment Assessment

## ● 1 - Pontic Space





## 2- Residual Ridge Contour



# Classification

- A- According to Pontic material.
- B- According to design of the ridge lap area.
- According to the Position.
  - 1- Anterior*
  - 2- Posterior*

# According to design of the ridge lap area.



## *Mucosal Contact*

- 1- Saddle
- 2- Ridge Lap
- 3- Modified Ridge Lap
- 4- Ovate
- 5- Conical

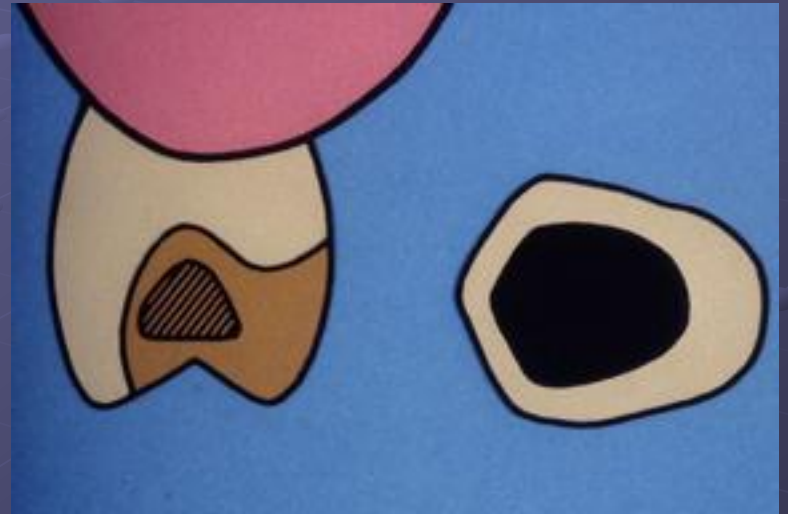
## *No Mucosal Contact*

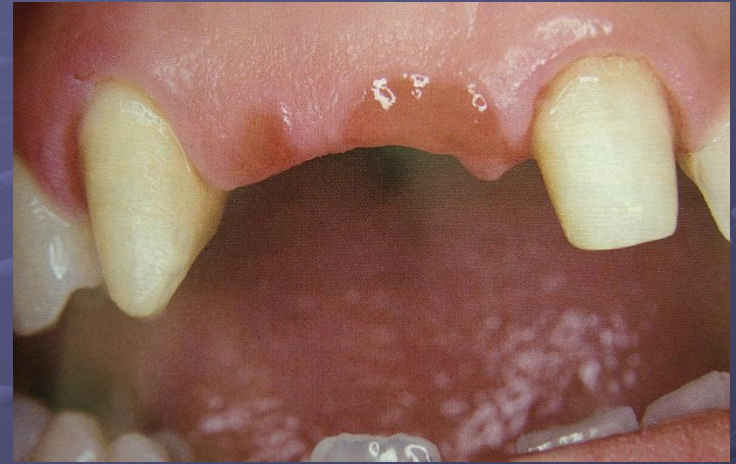
- 1- Sanitary
- 2- Modified Sanitary



# 1- saddle

- Forms a large concave contact with the ridge.
- Unclean & uncleanable.
- Should not be used.



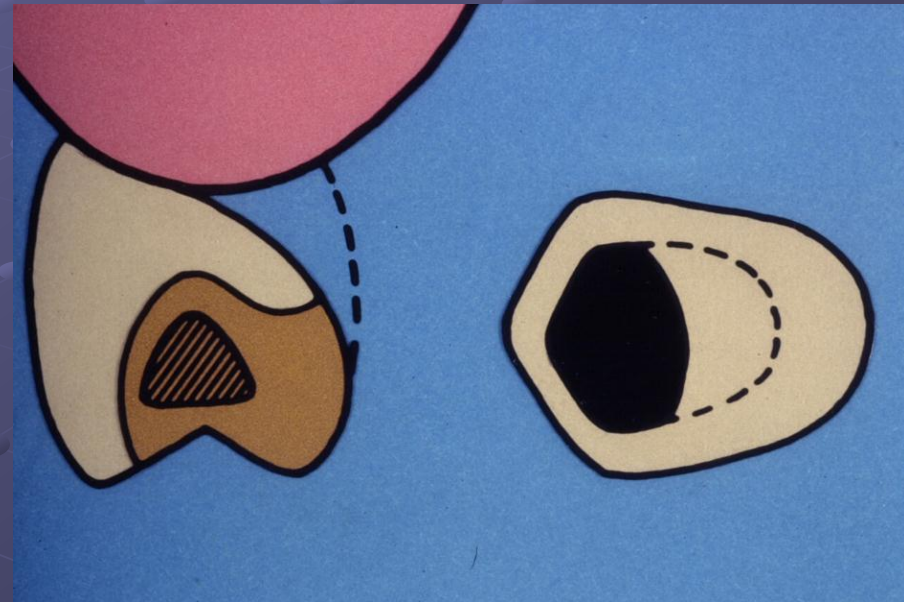




## ***2- Ridge Lap***

\*Ridge lap area of the pontic is adapted to the buccal portion of the ridge (concave form), and terminate the adaptation at the crest of the ridge being convex lingual (convex form)

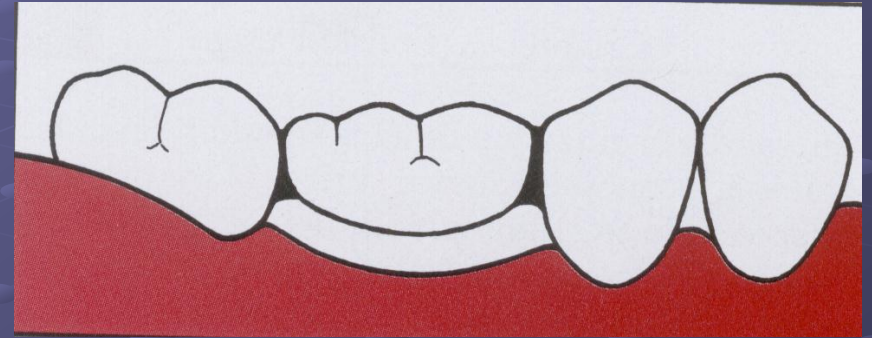
\*Provides excellent esthetics and excellent hygiene





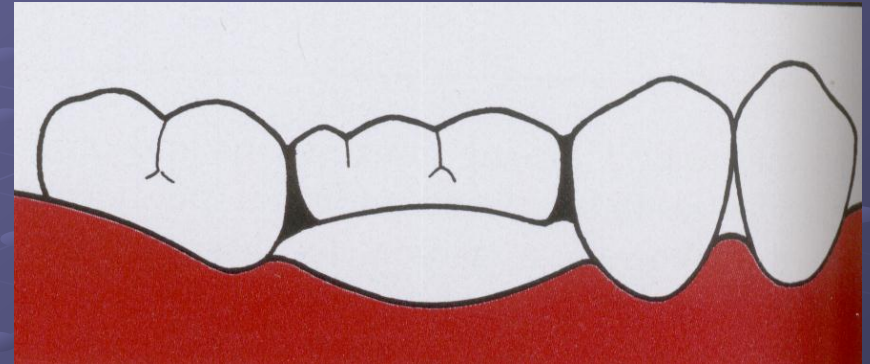
# 3- Sanitary (Hygienic)

- Exhibits no contact with the edentulous ridge.
- Used in the non-appearance zone particularly for replacing mandibular first molars.
- Restores occlusal function and stabilizes adjacent and opposing teeth.



## 4- Modified Sanitary (Perel , Stein pontic)

- Pontic is made in the form of a concave archway mesiodistally.
- The under surface of the pontic is convex faciolingually.
- Advantage: adds bulk to the connectors for strength in addition for good access for cleaning.

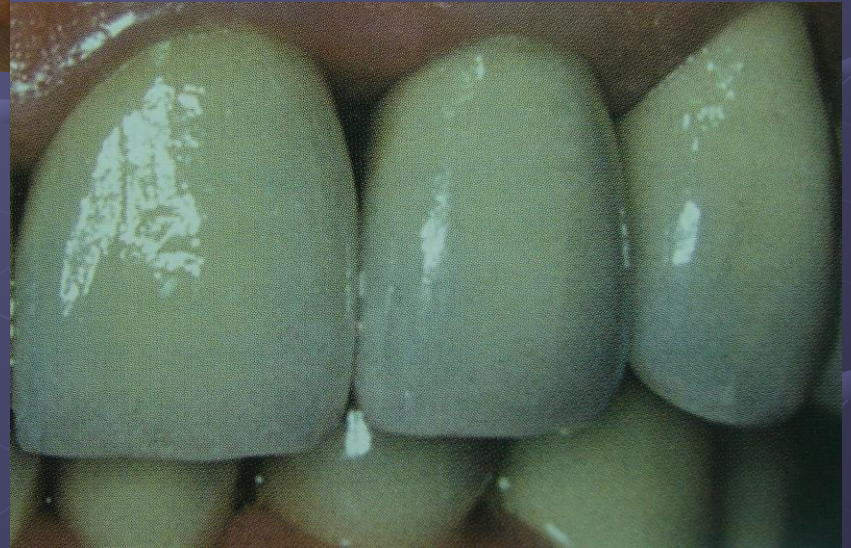


## ***5- Modified Ridge Lap***

- The lingual surface has a slightly deflective contour to prevent food impaction.
- The design gives the illusion of a tooth but possesses all convex surfaces for ease of cleaning.

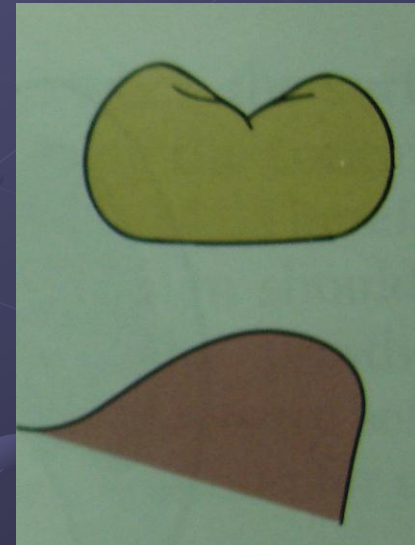
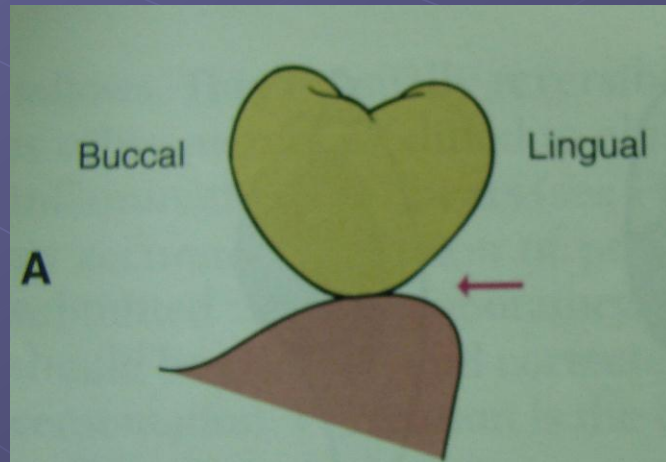
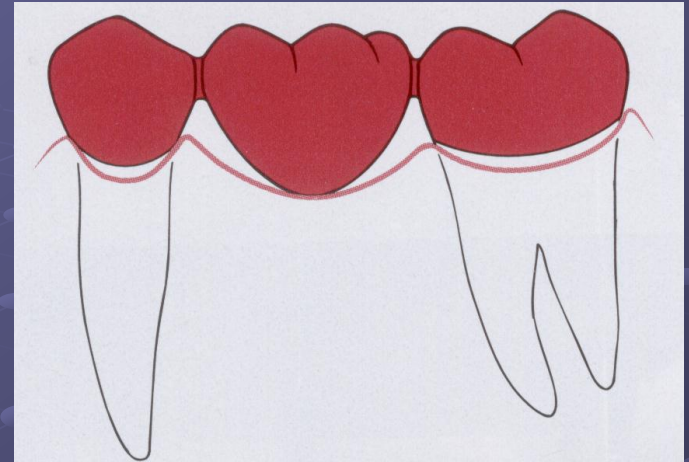






## 6- Conical (bullet, egg-shaped)

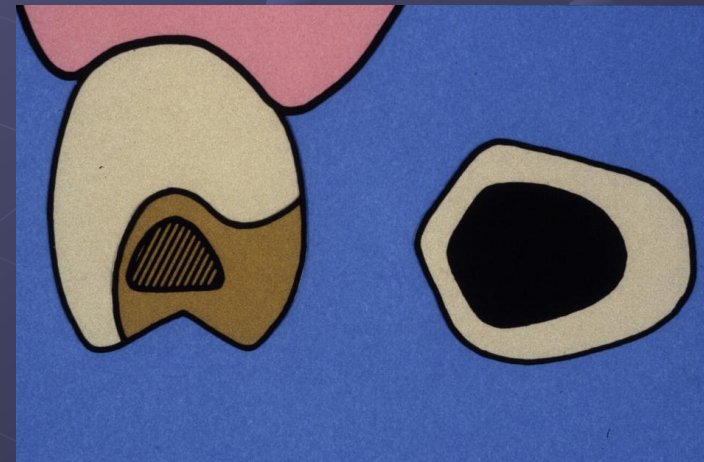
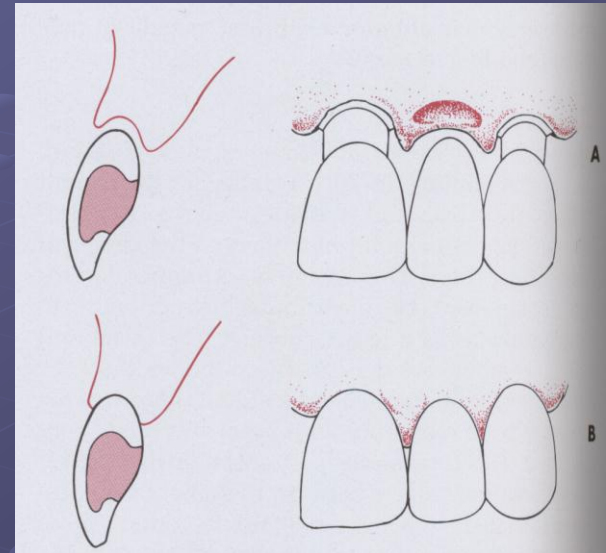
- Well suited for use on a thin mandibular ridge in the non appearance zone.





# 7- Ovate (Round-end design)

- **Indication:** used where esthetics is a primary concern.
- Works well with a broad flat ridge giving the appearance that it is growing from the ridge.

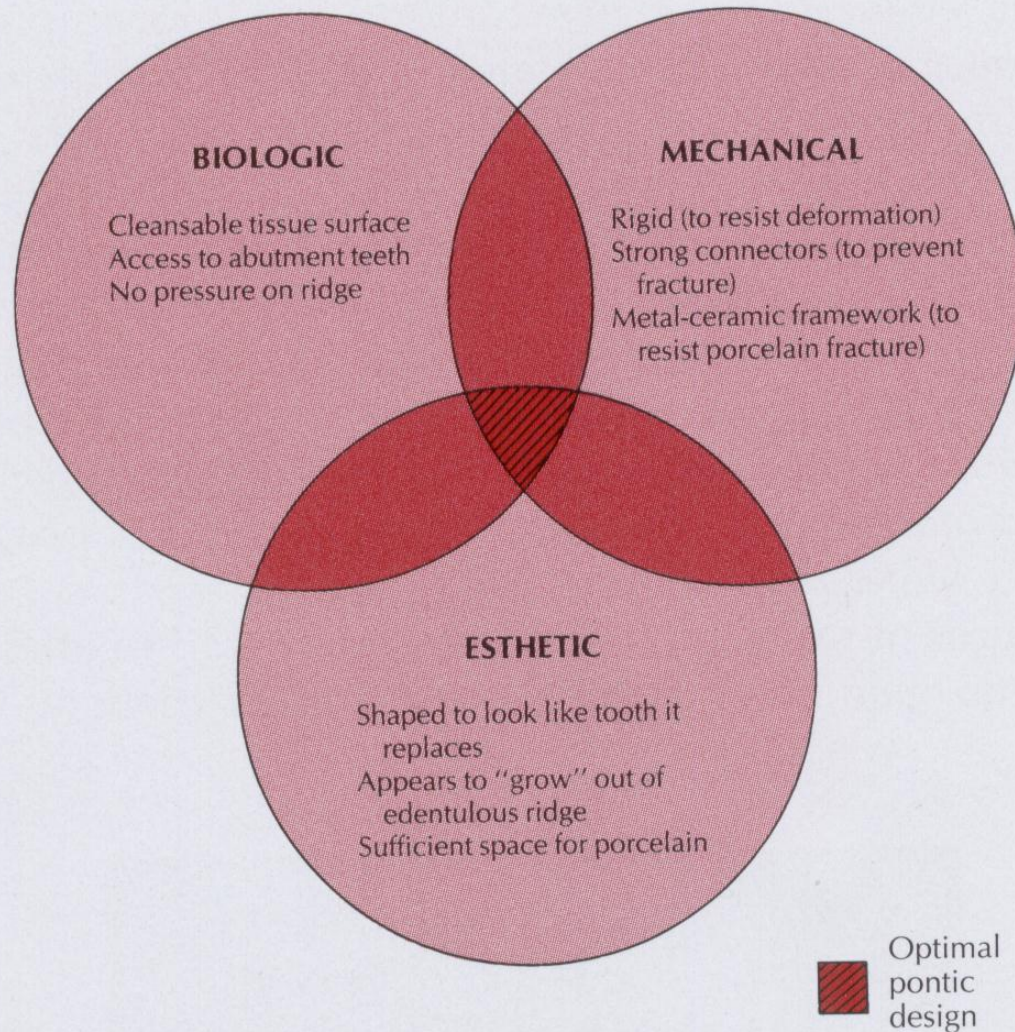


# ***Factors Affecting Pontic Design***

- **1- Biologic Considerations**
- **2- Mechanical Considerations**
- **3- Esthetic Considerations**



# Optimal Pontic Design



# 1- Biologic Considerations

## *A-Tissue Contact*

1- The Portion of the pontic touching the ridge should be :

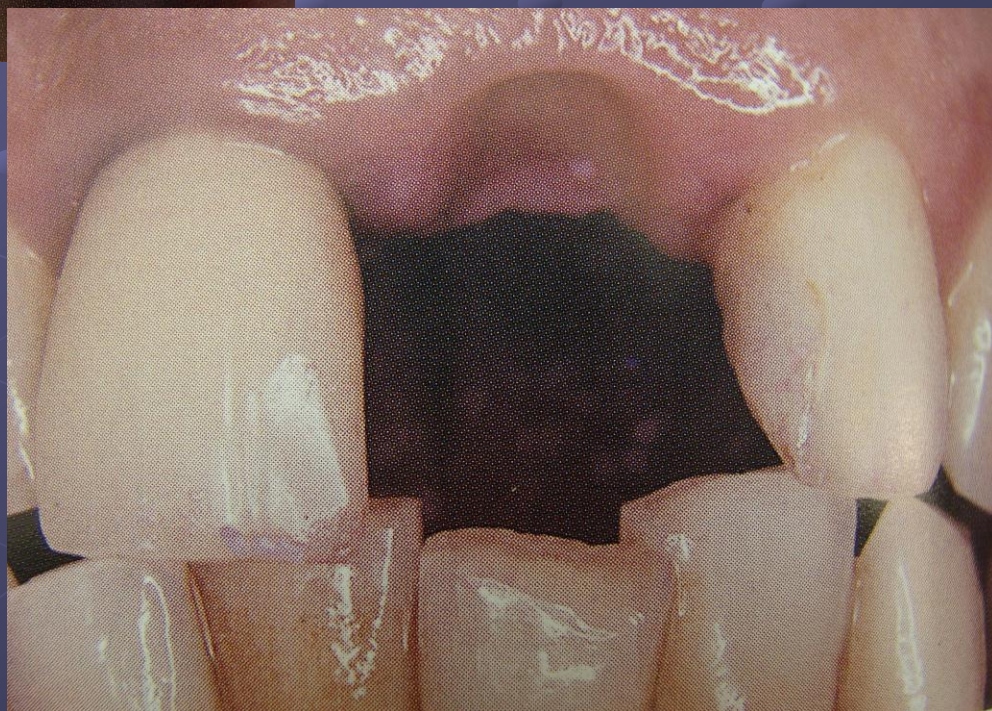
***a- Small***

***b- Convex***

***c- Passive contact (pressure free)***

2- The tip of the pontic should never extend past the mucogingival junction. It should only contact attached keratinized gingiva.







## ***B- Oral Hygiene Considerations***



# C- Pontic Material

- 1- All-Metallic. (Cast metal with mirror-like finish)

- 2- All Non metallic.

Porcelain

Acrylic  
(Temporary)

- 3- Combination

With ready made porcelain facings

Custom-made pontics

Porcelain

Acrylic



Remember that proper design is more important to cleanability and good tissue health than is the choice of the material.

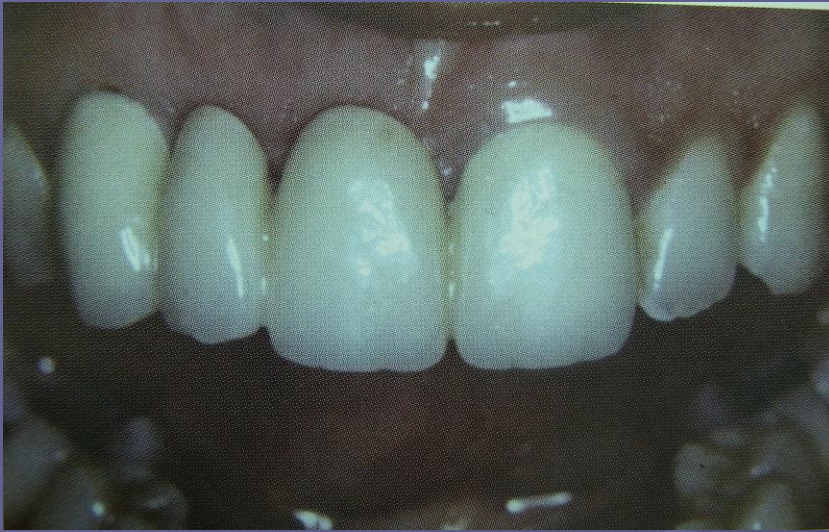
# ***Esthetic Considerations***

● An esthetically successful pontic will replicate the adjacent teeth as regards:

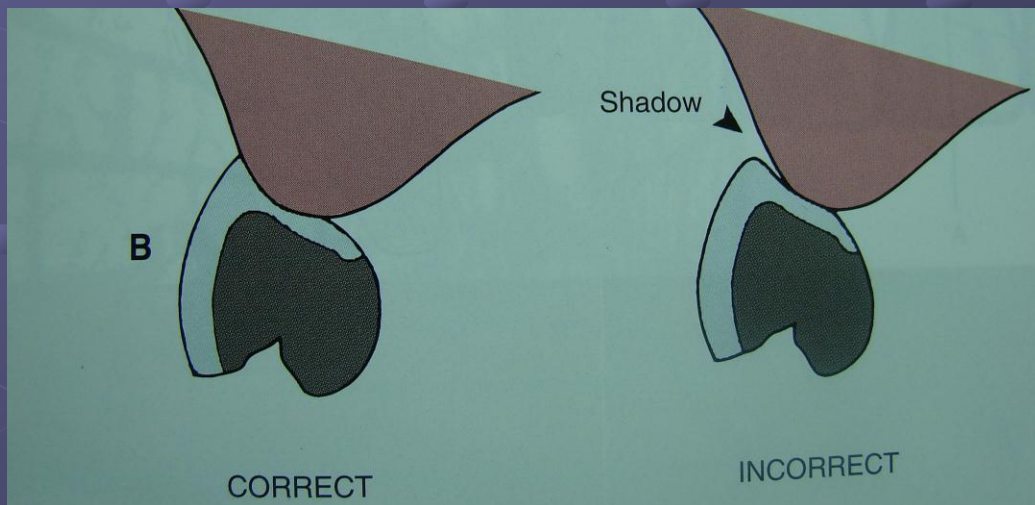
- ***Form***
- ***Contours***
- ***Gingival margin***
- ***Incisal edge***
- ***Gingival and incisal embrasures***
- ***Color***



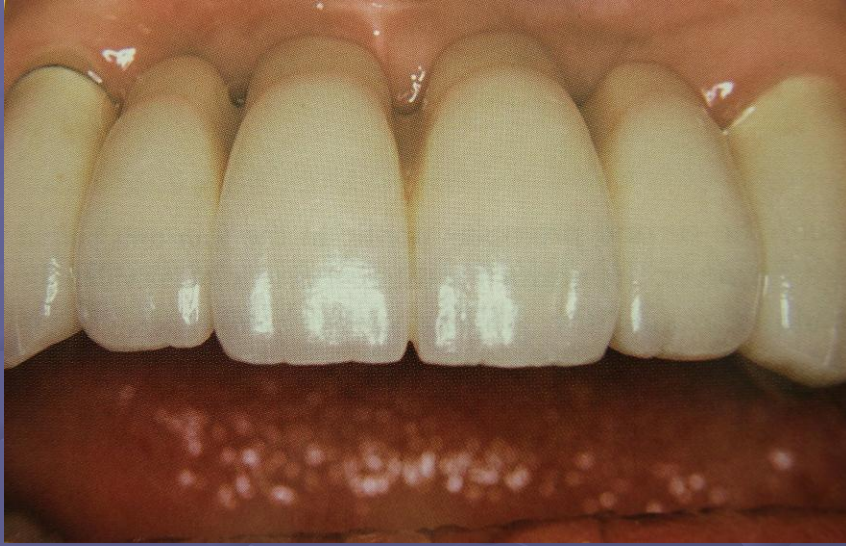
# A- Gingival Interface



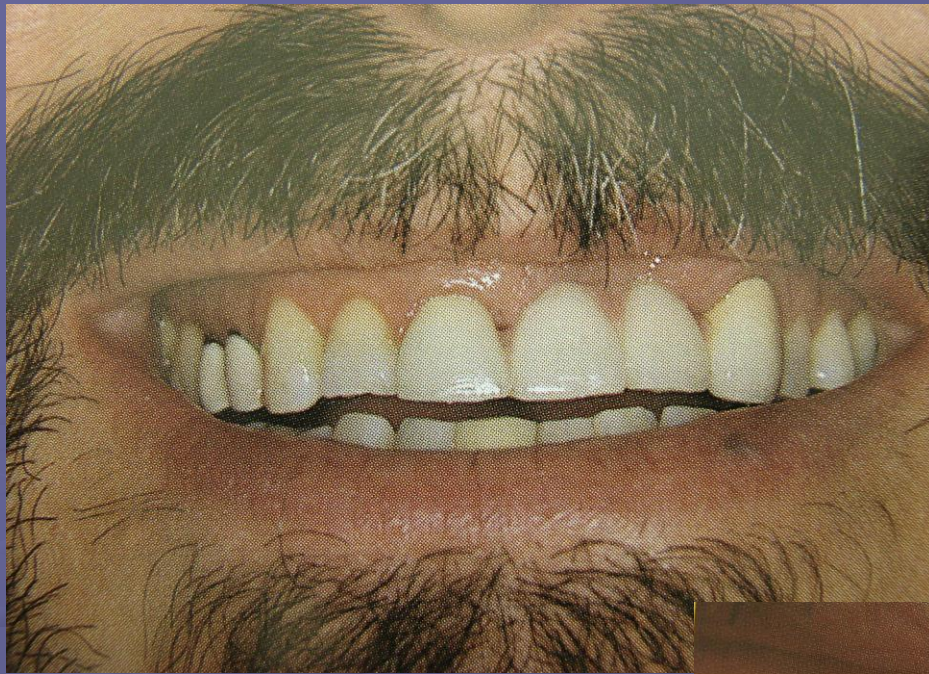




## B- IncisoGingival Length

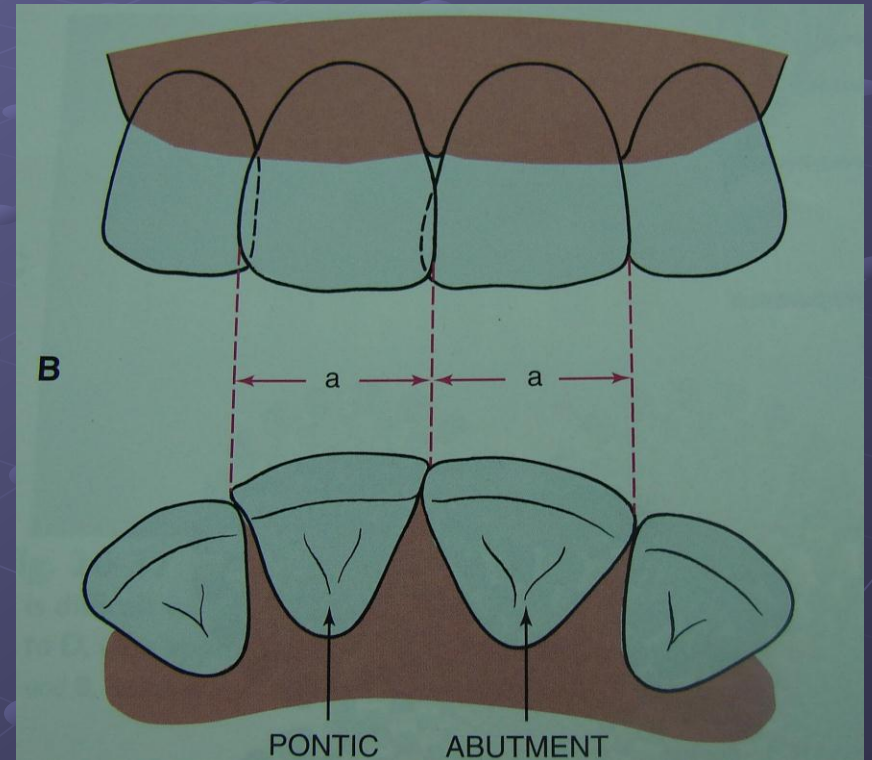
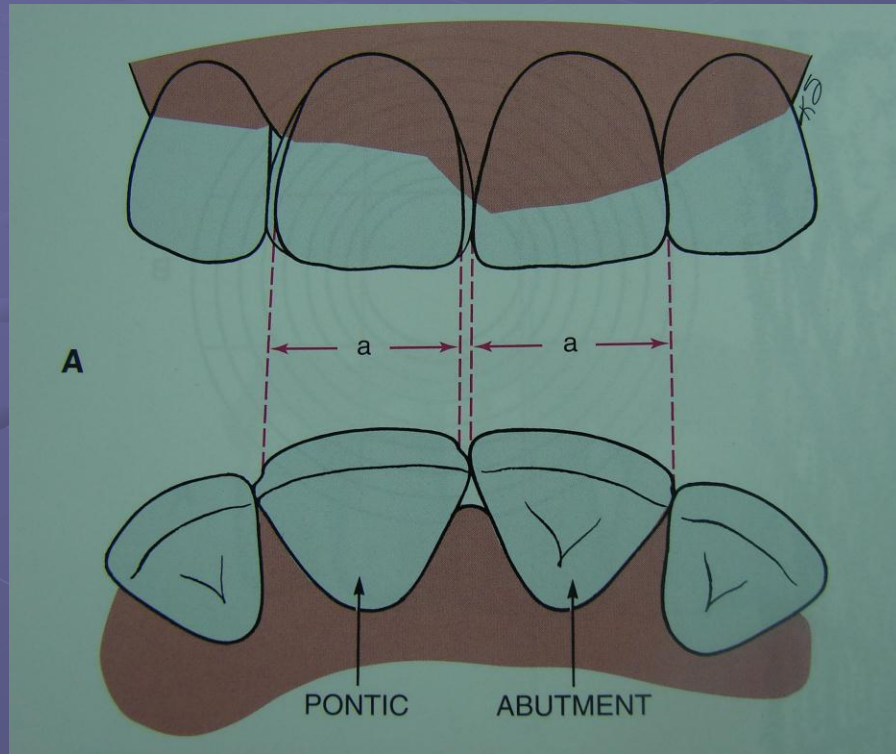


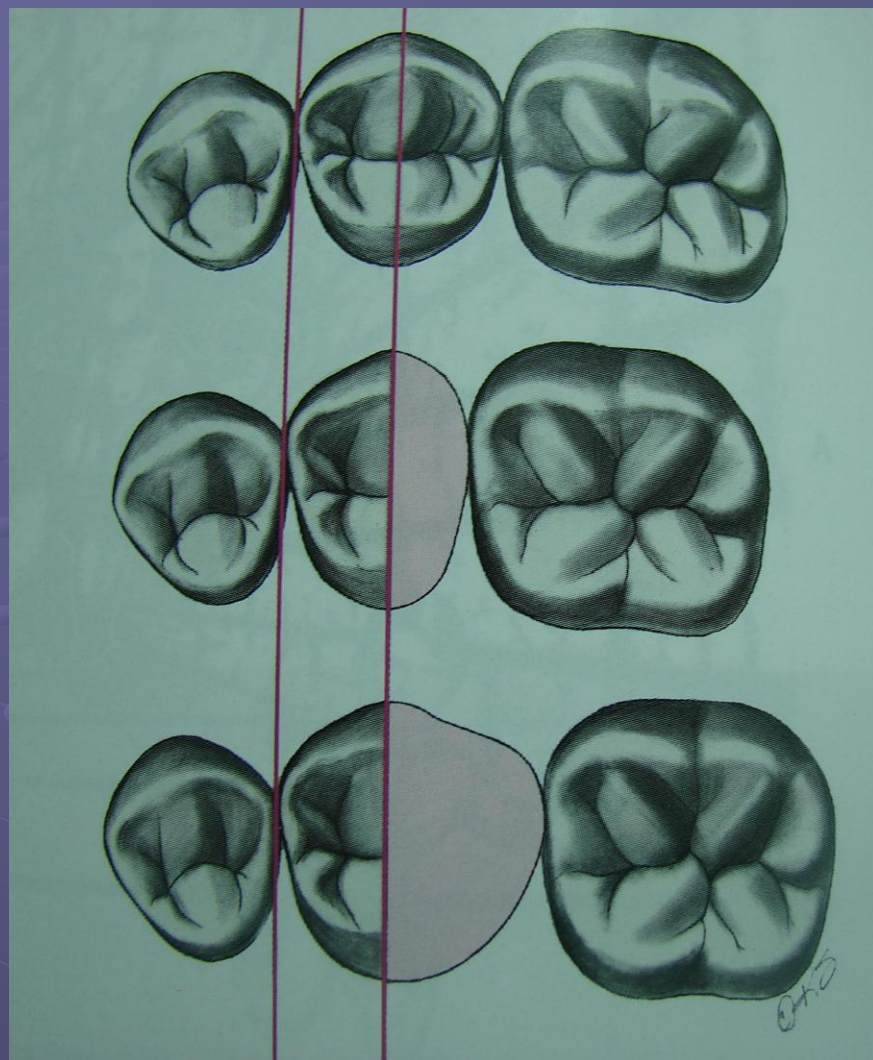






# C- Mesiodistal Width







# ***Mechanical Considerations***







The background of the slide is a solid blue color. Overlaid on this is a 3D perspective grid of small, light blue spheres. The spheres are arranged in a regular, repeating pattern that recedes into the distance, creating a sense of depth. The spheres are connected by thin, light blue lines, forming a wireframe grid. The perspective is from an angle, looking down at the grid as it extends towards the horizon.

Thank You